



---

**ENGINEERING OPERATIONS COMMITTEE  
MEETING MINUTES  
DECEMBER 7, 2004 – 8:00 A.M.  
PICTURED ROCKS CONFERENCE ROOM**

---

<i>Present:</i>	L. Tibbits M. VanPortFleet J. W. Reincke	J. Friend J. D. Culp A. Clover	J. Polasek M. Chaput T. Fudaly
<i>Absent:</i>	C. Bleech	E. Burns	B. O'Brien
<i>Guests:</i>	M. Bott D. Weber	P. Corlett B. Krom	A. Uzcategui

**OLD BUSINESS**

**1. Approval of the Minutes of the November 4, 2004, Meeting – L. Tibbits**

The minutes of the November 4, 2004, meeting were approved.

**NEW BUSINESS**

**1. Update of the MDOT Traffic and Safety Overhead Signs Typical Plans – M. Bott and A. Uzcategui**

Mark Bott and Alonso Uzcategui shared the following benefits/advantages of the proposed Overhead Signs Typical Plans.

- A. Increase in maximum sign area from 500 to 1,200 sq ft. (Note: Switching to Clearview font requires a larger sign area.)
- B. Lower cost (30 percent less), resulting mostly from the use of a 42 in. drilled shaft foundation vs. a large spread footing. It also eliminates the need for sheet piling and/or cofferdams. The average shaft depth is estimated at 35 ft.
- C. Increased competition due to a higher number of contractors available for drilled shaft construction.
- D. In most cases, the use of a 42 in. drilled shaft foundation will help reduce the need for utility relocations.

Installers and fabricators were consulted regarding feasibility/constructability concerns. No issues/concerns were observed.

**ACTION:** The proposed typical plan update was approved, based on the following actions being undertaken –

- FHWA (Tom Fudaly and Dave Calabrese) will review the proposed typical plan and provide comments.
- John Friend will schedule a follow up meeting with Traffic and Safety Support Area staff, Mark VanPortFleet (Design Support Area) and Steve Cook (Construction and Technology Support Area).

## 2. **Guidelines for the Use and Operation of Pedestrian Signals – M. Bott and P. Corlett**

The guidelines were reviewed and discussion generated the following questions: What is being done nationally? Are existing traffic signal warrants too restrictive for use on pedestrian signals?

**ACTION:** Tom Fudaly (FHWA) will do a national survey to find out what other states are doing and report back to EOC by the February meeting.

John Friend will schedule a meeting in January with Traffic and Safety Support Area staff and FHWA to discuss standard plans development and the proposed criteria for Countdown Pedestrian Signals.

## 3. **Pavement Selections – D. Weber**

### A. **US-23 Reconstruction: CS 25031, JN 75247**

The reconstruction alternates considered were: Alternate 1 – hot mix asphalt pavement (Equivalent Uniform Annual Cost [EUAC] \$141,882/directional mile), and Alternate 2 - jointed plain concrete pavement (JPCP) (EUAC \$111,660/directional mile).

A life cycle cost analysis was performed and Alternate 2 was approved based on having the lowest EUAC. The JPCP design and cost analysis are as follows:

10.5" (266.7mm).....	Jointed Plain Concrete Pavement (15.0' jt. spacing) (Mainline and Shoulders)
4" (101.6mm).....	Open Graded Drainage Course Existing Drainage System Existing Drainage System
14.5" (368.3mm).....	Total Thickness

Present Value Initial Construction Costs .....	\$700,789/directional mile
Present Value Initial User Costs .....	\$1,077,818/directional mile
Present Value Maintenance Costs.....	\$25,633/directional mile
Equivalent Uniform Annual Cost .....	\$111,660/directional mile

### B. **I-96 Rehabilitation: CS 41026/70063, JN 53377**

The proposed rehabilitation alternates considered were: Alternate 1 – hot mix asphalt overlay over rubblized concrete (EUAC \$109,791/directional mile), and Alternate 2 - an unbonded concrete overlay (EUAC \$74,676/directional mile).

A life cycle cost analysis was performed and Alternate 2 was approved based on having the lowest EUAC. The jointed plain concrete design and cost analysis are as follows:

6.5" (165.1mm).....	Jointed Plain Concrete Pavement (14.0 jt spacing) (Mainline and Shoulders)
1" (25.4mm).....	HMA Separator Layer (Mainline and Shoulders)
9.0" (228.6mm).....	Repaired Concrete Underdrain System
15.0" (381mm).....	Existing Base
31.5" (800.1mm).....	Total Thickness

Present Value Initial Construction Costs .....	\$429,311/directional mile
Present Value Initial User Costs .....	\$593,744/directional mile
Present Value Maintenance Costs.....	\$34,304/directional mile
Equivalent Uniform Annual Cost .....	\$74,676/directional mile

4. **Property Damage and Insurance Process – M. Chaput**

Mark Chaput informed the committee of an effort he is leading to change the existing process to allow estimated cost vs. actual costs when processing damage claims. This change will help in meeting the department's one year time limit to process damage recovery claims. Current estimates project the department may recover an increased amount of \$2 to \$3 million per year with the proposed changes.

A meeting is scheduled with Attorney General and Maintenance staff to discuss the proposed changes.

5. **Standard Plan Reviews – M. VanPortFleet**

Mark VanPortFleet requested a change in the existing signing practice for standard plans. The proposed change would reduce the required MDOT approval signatures from four to two. The current practice is for the Engineers of Design, Construction and Technology, Maintenance, and Traffic and Safety to sign the standards. The proposed practice is to have the Engineers of Development and Delivery approve the standards, which will reduce the process time. Staff of from all the support areas will remain involved in the review of the standard plans.

**ACTION:**      Approved.

\_\_\_\_\_  
(Signed Copy on File at C&T)

André Clover, Acting Secretary  
Engineering Operations Committee

AC:kar

cc:	G. J. Jeff	S. Mortel	J. Steele (FHWA)
	K. Steudle	D. Jackson	A. C. Milo (MRBA)
	L. Hank	W. Tansil	G. Bukoski (MRBA)
	EOC Members	D. Wresinski	R. J. Risser, Jr. (MCPA)
	Region Engineers	C. Libiran	D. Hollingsworth (MCA)
	TSC Managers	R. J. Lippert, Jr.	J. Becsey (MAPA)
	Assoc. Region Engineers	T. L. Nelson	M. Newman (MAA)
	T. Kratofil	T. Phillips	M. Nystrom (AUC)
	M. DeLong	K. Peters	J. Murner (MRPA)
	B. Kohrman	J. Ingle	R. Brenke (ACEC)
	J. Shinn	C&T Staff	